

“Once Upon a Mattress” comes to Mines



Please see page 4 for more “Once Upon a Mattress” pictures.

STEVEN WOOLDRIDGE / OREDIGGER

Advanced water technology floods Mines campus

Katie Huckfeldt
Staff Writer

Mines has long been on the cutting edge of energy research, thanks to its multiple campus research groups. One such group, AQWTEC (Advanced Water Technology Center), is making headlines locally and nationally by its integrated study of energy in water treatment technologies.

The main mission of the AQWTEC research team at its founding was to find a way to utilize impaired water resources. Polluted water sources could be treated and used for a new supply of drinking water or for irrigation. The problem with treating the impaired water arises from the fact that the more polluted the water, the more energy it takes to purify it. As the AQWTEC director and associate professor at Mines Jörg Drewes noted, “Energy and water are interdependent.” So research began in the early 2000’s to find a way to utilize energy in water treatment processes. The team needed a larger-scale test area in order to gather more accurate data, as well as a larger lab to analyze proposed membrane-based systems. AQWTEC’s focus on energy and water was an ideal fit at Mines and AQWTEC was officially founded in 2006.

The water quality lab AQWTEC is nationally-known and home to state-of-the-art equipment. The lab is one of the few in the nation capable of analyzing trace amounts of every-day household chemicals that get into drinking water supplies.

Chemicals that do not fully degrade from products such as shampoo are found in amounts as small as parts per trillion in the analyzed samples. These chemical traces can be harmful to humans dependent upon their behavior.

In connection to energy research, Drewes talked about AQWTEC’s latest venture into the energy sector to find impaired water sources. One potential water source, “blow down,” uses water from cooling towers. This water is full of salts, but can be refined and reused. Another source is geothermal brine, which is the excess water used in geothermal energy. This water is also highly polluted, but can be refined. For energy optimization in refining these sources, AQWTEC is looking into the utilization of waste heat, another bi-product of geothermal energy. The excess heat could be used to effectively purify the water and no excess energy would be needed. Membrane technology is also looking into the idea of waste heat. As Drewes explained, “We are researching a membrane that uses water waste heat to clean the water at temperatures... as low as 40°C.”

Membrane technology is a large branch of AQWTEC’s research. Where traditionally reverse-osmosis has been the favored technique to purify water, Drewes stated, “We have new membranes that produce the same quality of water for a cheaper price.” Along with more cost-efficient membranes, research is also being focused towards “natural membrane systems.” These natural membranes use soil to purify water.

The water is passed through the soil which acts as a bioreactor and experiments have shown that the process is effective. Drewes points out that, “These systems require no energy and have a very low carbon footprint.” Looking at world-wide implications, the natural membranes could prove to be a solution for third world countries in need of water treatment as these systems are easy to build and require no energy.

Although AQWTEC is known world-wide, only a few know of their local work in the Mines area. In 2003, AQWTEC partnered with the city of Golden to establish a pilot-scale laboratory used for teaching and research. The lab is located behind another well-known “lab” - Coors. Currently, AQWTEC is working on a wastewater reuse project at the Mines Park apartments. A test site has been set up to treat the water from the apartments locally. By treating the water on-site, energy and money are saved as the water does not have to be pumped to a water treatment facility and back. AQWTEC is a supporter of more localized water treatment, and Mines Park is the perfect demonstration study. Nearby in Aurora, AQWTEC supported the city’s efforts to install a natural membrane barrier system in their local river. The city approved the system and they have begun planning and construction.

With research groups such as AQWTEC on campus, Mines will undoubtedly continue to lead the way in technological advances in the areas of water and energy.

ASCSM approves Marquez wing

Ian Littman
Assistant Business Manager,
Web Content

“Because of our economic downturn construction prices have dropped dramatically,” stated Campus Architect Chris Cocallas of the Brown Hall addition in Thursday’s ASCSM meeting, “the building came in roughly ten million dollars under budget.” The shortfall leaves 20 percent of the Academic Construction student fee available for other projects. Cocallas brought with him a proposal to use these funds, manifested by a \$175 student fee this semester, escalating to \$275 per semester next fall: add a non-Petroleum-Engineering wing to Marquez Hall.

This \$8 million undertaking, after architectural, testing, and contingency costs are added in, would result in a 21,500 square foot building with 14,000 square feet of classroom and lab space, 38% of the size of Marquez Hall proper. “The reason that we’re coming to you now is that we’re in design for Marquez Hall...a Petroleum Engineering building,” Cocallas explained. “At one time, Marquez Hall had a wing on it and it was a much bigger project, but funding fell short and the project was downsized.” The project will restore that wing, which will include seven seminar rooms, four sixty-student classes, one eighty-student class and 4,500 square feet of lab space. The lab space is currently not earmarked for a specific department; however, this will likely change as the design process progresses. Office space for professors and graduate students will not be a major feature of the building.

Cocallas stated that construction on Marquez hall (and the associated wing) will begin at the beginning of next year and be completed in Summer 2012. Classes in the wing will commence in the 2012 fall semester. Once Marquez Hall is complete, the Petroleum Engineering department will cede their current space in Alderson Hall to Chemical Engineering and the registrar to be used for general classes.

“We thought that we might be able to get a bigger bang for our buck if we could build this wing,” Cocallas expounded, citing efficiencies of fifteen to twenty percent versus building the structure separately. “This is a time thing. If we don’t do this now then we lose the opportunity,” he continued. “If Marquez gets too far into design we won’t be able to do this.” The current economic situation compounds these efficiencies

with a low price escalation rate, something that can’t be guaranteed in the more distant future. The Marquez wing, as yet unnamed, will also get some space efficiencies from its proximity to Marquez Hall; the wing will rely on Marquez’s elevator and partially on its bathrooms, leaving more space for classrooms and labs. Stylistically, the wing will share external materials, glazing and window color with Marquez Hall; however, other stylistic cues like glass usage will separate the structure from its neighbor.

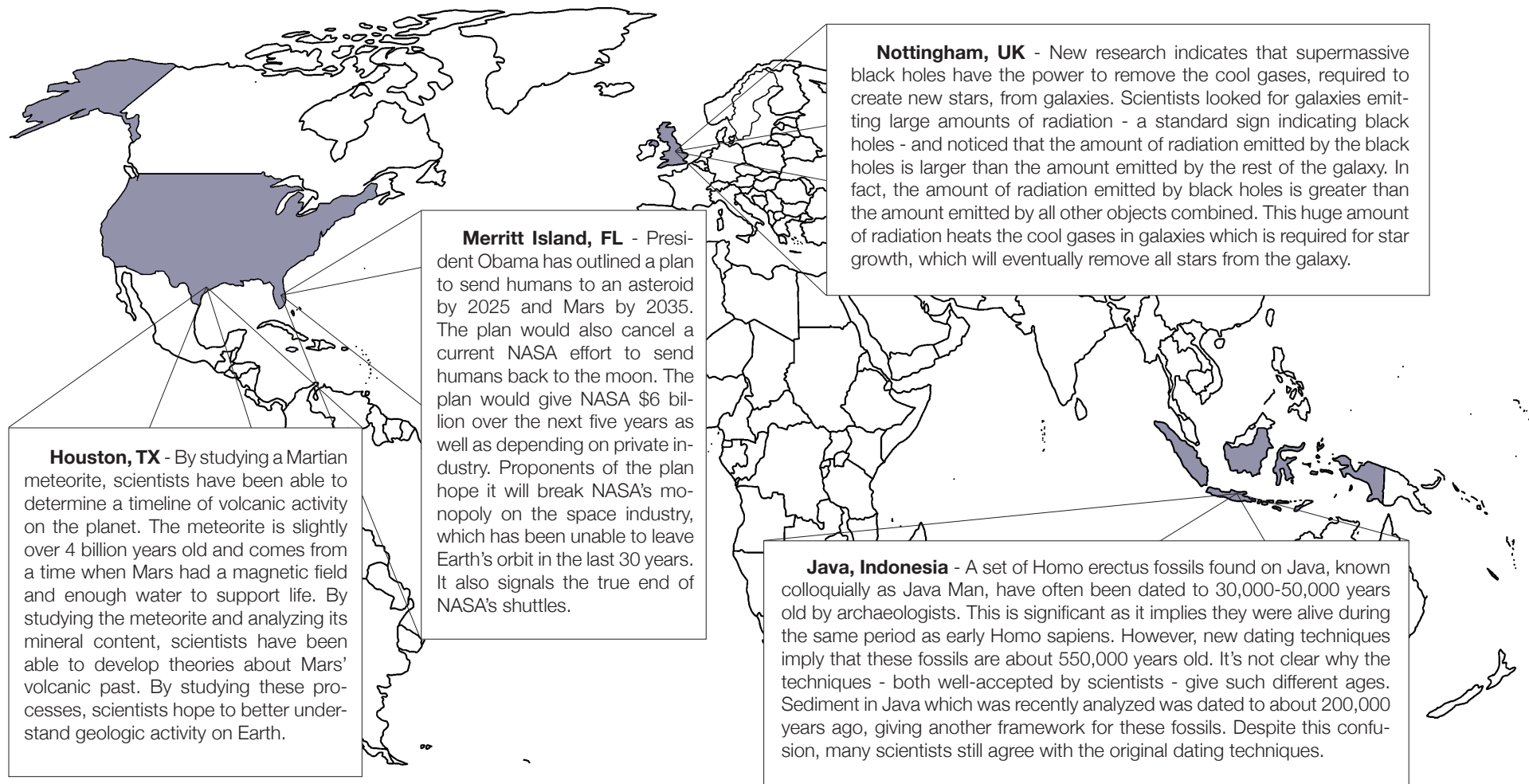
Several meeting attendees mentioned that the excess funds could instead be used for a parking garage; however, Cocallas stated that, in order to do this, the current fee would have to be restructured; the fee’s stated purpose is for classroom and laboratory space, not parking. He also noted that a 400-space, \$10 million parking garage would incur \$120,000 in maintenance costs per year, plus another \$700,000 to repay the 30-year bond required to finance the structure. To be self-sustaining, parking permit fees would have to be \$2,050 per year per space for such a structure; maintenance costs alone would be \$300 per year per space. In comparison, complete renovations for the Ford Lot, which will increase its capacity to around 350 spaces, will cost \$900,000.

Cocallas also cited the master plan’s goal of making Mines a more pedestrian campus. “Typically that means you move your parking to the perimeter of the campus,” he said. “You want to intercept the cars before they get on campus.” This would place a potential parking garage on the site of the current Freshman Lot, in Ford Lot or possibly near the athletic fields. “Building parking lots doesn’t make parking more convenient. It just adds parking,” he continued. “It adds very expensive parking. You couldn’t put a garage in Kafadar Commons unless you put it in underneath, which would be kind of cool, but very expensive,” he stated. He also noted that, when current parking improvements are completed, Mines will have a parking surplus for the next four years. That said, the master plan calls for removing street parking, which would decrease campus parking capacity by roughly 500 spaces.

The ASCSM motion to approve the fee redistribution for the Marquez wing was approved with little opposition. Graphical information on the project will be posted in the online edition of this article once it is provided.

Scientific discoveries this week

Jake Rezac, Content Manager



Houston, TX - By studying a Martian meteorite, scientists have been able to determine a timeline of volcanic activity on the planet. The meteorite is slightly over 4 billion years old and comes from a time when Mars had a magnetic field and enough water to support life. By studying the meteorite and analyzing its mineral content, scientists have been able to develop theories about Mars' volcanic past. By studying these processes, scientists hope to better understand geologic activity on Earth.

Merritt Island, FL - President Obama has outlined a plan to send humans to an asteroid by 2025 and Mars by 2035. The plan would also cancel a current NASA effort to send humans back to the moon. The plan would give NASA \$6 billion over the next five years as well as depending on private industry. Proponents of the plan hope it will break NASA's monopoly on the space industry, which has been unable to leave Earth's orbit in the last 30 years. It also signals the true end of NASA's shuttles.

Nottingham, UK - New research indicates that supermassive black holes have the power to remove the cool gases, required to create new stars, from galaxies. Scientists looked for galaxies emitting large amounts of radiation - a standard sign indicating black holes - and noticed that the amount of radiation emitted by the black holes is larger than the amount emitted by the rest of the galaxy. In fact, the amount of radiation emitted by black holes is greater than the amount emitted by all other objects combined. This huge amount of radiation heats the cool gases in galaxies which is required for star growth, which will eventually remove all stars from the galaxy.

Java, Indonesia - A set of Homo erectus fossils found on Java, known colloquially as Java Man, have often been dated to 30,000-50,000 years old by archaeologists. This is significant as it implies they were alive during the same period as early Homo sapiens. However, new dating techniques imply that these fossils are about 550,000 years old. It's not clear why the techniques - both well-accepted by scientists - give such different ages. Sediment in Java which was recently analyzed was dated to about 200,000 years ago, giving another framework for these fossils. Despite this confusion, many scientists still agree with the original dating techniques.

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ASSOCIATED
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Headlines from around the world

Emily Trudell, Staff Writer

Toyota Motor Corp. announced a recall of 600,000 Sienna minivans sold in the United States due to potential corrosion in the carrier cable of the spare tire, caused by road salt. The recall effects models 1998-2010.

The death toll in China rose to at least 1,144 people by Friday after a **6.9 magnitude earthquake** hit western China last week. Nearly twelve thousand people were injured, and almost 500 remain missing. Authorities report that tents will be put up to shelter homeless survivors, and trained dogs will be used to find any other survivors who are trapped.

Charges were dropped in Haiti against nine of the ten **jailed American missionaries** accused of kidnapping. The group leader, Laura Silsby, is still being held in Haiti, but maintains that the missionaries were trying to keep children safe after the January earthquake. The missionaries were caught transporting 33 minors across the Haiti boarder without proper documentation.

Four **wild cheetah cubs** were born in the Arabian Wildlife Park in the Arabian Peninsula, and became the first wild cubs to be born in four decades. Cheetahs have been extinct on the Peninsula since

1972, but were reintroduced last year.

The Polish government announced plans to hold elections in June for a successor to **President Lech Kaczynski**, who was killed in a plane crash last week.

A **suicide bombing** at a hospital in Pakistan left at least eight people dead and 35 people injured. Among the dead were a journalist and four police officers. A Pakistani militant group called Lashkar-e-Jhangvi has claimed responsibility for the explosion.

Ash from an **Icelandic volcano** caused a halt in air traffic in Europe and the cancellation of nearly 6,000 flights. The ash is expected to continue to keep

European flights grounded over the weekend. The last eruption of this Icelandic volcano occurred in 1821, and lasted for two years. Geophysicists say that it is too soon to predict how long the volcano will continue spewing ash.

A study conducted by Harvard Medical School researchers found that 11 **top insurance companies** offering life, disability, or health insurance held roughly 1.9 billion dollars of stock in the nation's five largest fast food chains.

The United Nations said that better security could have prevented the assassination of former Pakistani Prime Minister **Benazir Bhutto** by a suicide bomber in 2007.



Local News

Samantha Lawrence received \$12,000 from the National Association of Corrosion Engineers in scholarships. She was selected due to her academic successes and commitment to the industry.

Mines' men's baseball team defeated Colorado Christian University on Thursday 11-5, improving the Oredigger's record to 7-22. This was followed by 2-13, 4-7 and 5-7 losses at Nebraska-Kearney between Friday and Saturday.

Mines' women's softball team defeated Fort Lewis in a two-game series 4-0 and 5-2 on Saturday improving the team to 19-20 for the season. Their final home games of the season will be played next Saturday.

Mines was ranked 63rd out of 193 engineering schools in the "U.S. News and World Reports" list of top graduate schools in the United States, jumping 9 places from its previous place.

Wendy Shortridge, a library circulation tech, won the Denver Post's Haiku contest with her poem about eggs.

Geek of the Week

...Chris Graff, Junior: Electrical Engineering

Dan Haughey
Staff Writer

Do you consider yourself a geek?

I have no doubt in my mind that's true. I consider it a universally acknowledged fact that fish will swim the ocean, birds fly, and Chris Graff is a geek.

Do you prefer nerd or geek?

Doesn't matter; there is nerd, geek, dweeb, or dork. Well, I'll go with geek; it seems less demeaning than nerd does.

How did you come to be at Mines?

I used to live in Illinois and all my friends I had in high school were going to go to U of I or some other Illinois school close by, but I liked Colorado more than that and I originally applied to CU, CSU and Mines. I decided to go to Mines because it was a smaller school and when I got here, I knew that I kind of belonged.

What are your favorite geeky pick-up lines?

Does this smell like chloroform to you? You can put a Trojan on my hard drive anytime. Your beauty ri-

vals the graphics of Doom 3. Want to see my red hat?

What is the geekiest thing you have seen or done?

My friends and I were watching Star Wars episode 2, the one where Obi Wan Kenobi is on Kamino. Obi Wan goes to check out what is going on and says R 4, such and such, do a communicate to Coruscant. I responded saying R4 is the Windows ME of astromech droids. I dare you form a geekier sentence! Don't try; it is impossible.

What is your favorite geek joke?

A biologist, a physicist, and a mathematician are sitting in an outdoor cafe. They watch two

people go into a building across the street. Shortly thereafter, three people come out.

"Nah," says the physicist. "There was obviously error in our initial measurement."

"Hmm," says the biologist. "It looks like they reproduced."

The mathematician looks up from his coffee. "If another person goes in, it'll be empty."

Continued online at oredigger.net/features



PHOTO COURTESY CHRIS GRAFF

TECH BREAK

Cellular and internet myths busted

Ian Littman, Tech Break Columnist

For those who know exactly what 3G versus 4G, fiber to the home versus fiber to the node, CDMA versus GSM, and Mbps versus MB/s are, read this column anyway. Your comments are appreciated. For everyone else, here's hoping this column clears up some fuzzy areas that most people have about networks of both fixed and mobile variety. Don't worry... these misconceptions are probably not your fault... unless you are confusing bits with bytes. This brings us to the first questions:

My ISP says my internet package is 12 Mbps, yet I only get 1.5 MB per second on downloads! What gives?

You're suffering from the bit-versus-byte debacle. Eight bits make up a byte; network speed is measured in (kilo- or mega-) bits per second and everything else is measured in (kilo-, mega-, giga-, or tera-) bytes (per second). Divide 12 Mbps by eight bits in a byte and you get 1.5 MB/s.

Fortunately we're in an area where no ISP has confused bits (lower case "b") and bytes (upper case "B") on their website. It's an atrocity against unit conversions, but this slip-up does happen all too often.

One other thing to note is that, unless you're on Qwest's new VDSL2 infrastructure (which isn't

available in Golden), you can expect to get only 85% of your advertised internet speed due to DSL-related overhead. With the new infrastructure, the percentage climbs to about 92%. Comcast gives its speed tiers enough juice to deliver 100% of their advertised speeds.

Comcast talks about their fiber optic network. Qwest talks about theirs. Are they telling the truth?

Technically yes, but both providers are muddying the waters. Every one these days runs their network on fiber at some point, though how far the customer is from the fiber varies significantly from provider to provider, and from technology to technology. For example, in Golden, Qwest probably has fiber in their central office building. However, your DSL connection is all copper from there, which might entail a distance of up to three miles.

Qwest's newer ADSL2+ service generally gets users within a mile of fiber, and their "cutting edge" VDSL2 service brings fiber to within two thousand feet of those lucky enough to get the technology. In all cases, however, Qwest does not give you fiber to the home. Comcast is similar in this regard, though chances are Comcast has fiber closer to your home than Qwest does.

Continued online at oredigger.net/features

High Grade release party

Come on out to pick up your copy and celebrate with us the creative works of the student, staff and faculty body. Fine food and refreshments will be provided.

When: Friday April 23, 5 pm

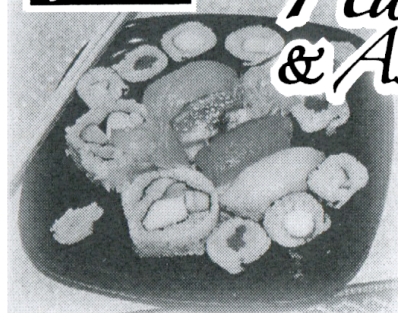
Where: Student Center Ballroom A



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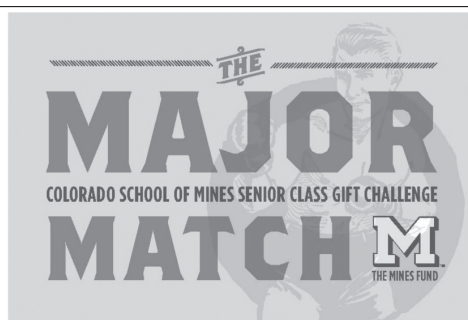
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How will your department stack up?

It's a departmental challenge. The winning lightweight and heavyweight departments (w/ the highest % of seniors who give) will be announced at the end of the party.

Your gift will be doubled!
Take advantage of President Scoggins' generous match before April 20.

Plus, the winning departments will receive an additional match, as well as an end of year party!

Senior Class Gift Celebration Party

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April 20, 5:30 – 7:00pm
Coolbaugh House

Brief remarks from President Scoggins at 6:00pm

All seniors and faculty/staff are welcome!

Please join the Colorado School of Mines Math Club as it hosts its First Annual Pi Mile Fun Run.

Race distance is 3.14159 miles! Fun for the entire family- runners and walkers (even four-legged furry friends are welcome).

Pre-registration is \$15, race day registration is \$20 (begins 7:30 am day of race).

The race begins at the new Stermole Track Complex (12th and Maple St.) and follows the Clear Creek recreation path.

Every participant receives a T-shirt and is entered into our raffle!

For more information and to register, visit http://mcs.mines.edu/pi_mile/

Mines Little Theatre presents:

Once Upon a Mattress

A Must See!



Above, Sir Harry (Jonathan Lacouture) embarked on a quest to the far lying reaches of the kingdom to search for a princess for Prince Dauntless. (Travis Bybee, not shown)



Above, Princess Winnifred (Kari Kron) won over the court with her charm, wit and unusual entrance to the castle.



Above, King Sextimus (Thorn Svendsen), who is mute, tried to explain to his Jester (Daniel May) and Minstrel (Stephen Cuttler) that Sir Harry's girlfriend Lady Larken (Roxy Frary) was pregnant.



Above, Princess #12 (Leah Langston) is devastated because she was unable to pass Queen Aggravain's trials (Molly Jane Perkins). The Queen unfairly asked her, "What was the middle name of the daughter-in-law of the best friend of the blacksmith who forged the sword that killed the beast?"

Take a break, join MLT "Upon a Mattress"

Courtesy Molly Perkins
Mines Little Theatre

Fairy tales and childhood narratives often exemplify morals of good conquering evil and elevate a hero or heroine that saves the day, so to speak. One story that has not yet made the celebrity list of glorified Disney classics is that of the Princess and the Pea. But what about the normal, everyday royalty and the struggles that they go through? The princesses that do not have fairy godmothers or magic potions? What about the over-protective mothers? The pressure put on the prince to marry? The birds and the bees? When a princess comes to the castle to fulfill an opening for a princess, the prince falls in love with her despite the queen's strict criteria for accepting

not just anyone into the family.

Mines Little Theatre presents "Once Upon a Mattress," the true story of the Princess and the Pea... and the not-so-acclaimed quest of finding a real princess. The play, based off of the book written by Jay Thompson, Dean Fuller, and Marshall Barer, featuring music by Mary Rodgers and lyrics by Marshall Barer, and originally based off of the Hans Christian Andersen tale, will be performed by Mines students this weekend. This is your last chance to see the show at CSM and understand why finding a princess is no tiptoe through the, well, in this case, mustard flowers.

"Once Upon a Mattress"

Friday, April 23 and Saturday,
April 24

7:30 PM, Metals Hall



Above, a large crowd gathered around Princess Winnifred (Kari Kron), who slowly won over the overprotective Queen Aggravain (Molly Jane Perkins) with song.

ALL PHOTOS STEVEN WOOLDRIDGE / OREDIGGER

Phoenix redefines alternative rock

Spencer Nelson
Content Manager

Of the many releases seen in the music world last year, this one album seemed to stand out on the top album lists of 2009. Although not a new band by any measure, Phoenix has been treated as such by many as their latest album, Wolfgang Amadeus Phoenix, really projected them into the American spotlight.

The French band starts their breakout album with the upbeat song, "Lisztomania." The catchy riffs carelessly thrown into the mix can keep any listener noticing different part of the song each time listened through. The track comes off as a bit eclectic because of this, but is a solid start to the album that closely follows the same musical line.



Following the first track comes the unavoidable "1901." It is hard to miss this song on the radio, Cadillac commercials, or numerous TV shows and movies, and for good reason. The song can easily be put as the epitome of alternative rock. From the drums to the Vampire Weekend-esque vocals to the fast, lighty distorted guitar and good use of synth, it incorporates elements that can be heard in every other alternative rock band out there.

After "1901," the album mel-

lows out with "Fences," but doesn't remain that way for long. The catchy "Lasso" and "Girlfriend" continues out the album, but nothing quite as worthy as the starting two tracks.

The problem the last three-quarters of the album faces is that each song is indistinguishable from the previous. After listening through the album a few times, each part of the album is memorable, but still impossible to divide up into distinct songs. The guitars and synth and vocals remain constant from start to end.

While the repetition is obvious, it is not necessarily a problem for Phoenix. As stated earlier, their sound is basically the epitome of alternative rock. By that reasoning, this entire album can really be viewed as a continuous work at the peak of alternative rock.

However, little stands out after the first 10 minutes and fades into the background quickly.

Wolfgang Amadeus Phoenix is certainly deserving of its Grammy for Best Alternate Music Album since it is nothing but alternative from start to finish. However, some variety would have been nice. It's not something to sing along to, but rather Grammy-winning background music. Good for fans of Vampire Weekend, Anberlin, and the Killers.



The Yard House is an upscale, casual eatery known for great food, classic rock music and the world's largest selection of draft beer.

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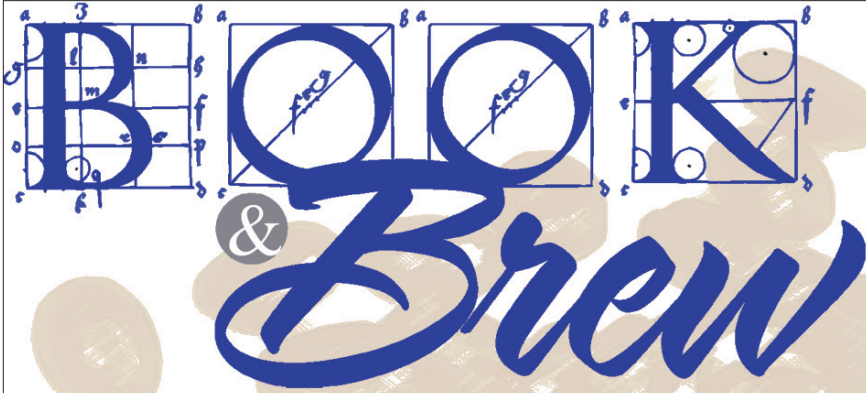
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Minds at Mines

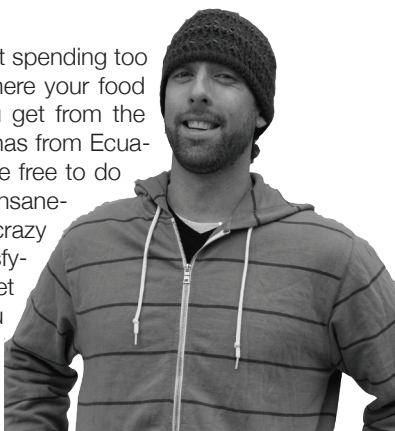
Ways to be green without spending green

Roby Brost
Staff Writer

Kermit the Frog once lamented, "It's not that easy being green." He could have added, "And it's not cheap either." So, how do you balance the two? With Earth Day right around the corner, commercials advertising green products and energy saving gadgets abound. But as many students have found, being good to the environment does not always mean being good to the budget. And not all the high tech gadgets are worth the high dollars. Simple solutions can be as effective without the high price tag. Sometimes being "green" can help keep some green in the old pocket book. Students on the beautiful Mines campus share some ideas on how to keep both the grounds and the budget looking their best for spring.

"One way to be greener without spending too much money is to understand where your food comes from. All the produce you get from the store is from Mexico, or the bananas from Ecuador or far away. Obviously, you are free to do what you want, including cook an insanely complicated meal with all these crazy ingredients, but I find it more satisfying to go to the farmers market and shake the farmers' hand. You know that these tomatoes were grown by this person, in Colorado. It's more energy efficient, cost efficient, and delicious."

Andy Gruel



"I think a good way to be green and still save money is to use a reusable water bottle. Instead of buying Aquafina, or one of those disposable water bottles, have a reusable water and fill it up from the sink. It's free, or cheap, water. Pretty much every one has a reusable water bottle, and if not, you can even reuse a plastic one."

Sarah Trebino

"Not wind energy! Oil shale may be the way to go."

Chris Heller



"One way to save energy without spending too much money would be to have class outside. Only when it's nice though... if it's not nice, then we shouldn't have class."

Steven Ruppert

After the budgets

Ryan Browne
Editor-in-Chief

Starting on April 1st, the Associated Students of the Colorado School of Mines (ASCSM) Budget Committee met for 14 hours over 5 days to look over nearly \$750,000 dollars in funding requests from clubs on campus. With only \$650,000 dollars in expected funds available, many clubs are seeing cuts to their requested ASCSM allocation.

Budget Committee has earned a reputation on campus for being a money-granting black box; requests are submitted and money, usually less than what was requested, is returned. In an attempt to eliminate this reputation, Budget Committee meetings were opened to the public for the first time this year. This resulted in 6 people across the 5 days watching the proceedings; almost all were there to defend their budget.

Having sat in the audience for many of those 14 hours and spent the rest as a proxy representative for the Board of Publications, I have criticisms for all involved parties.

For the students, some of you may complain when you learn that you are paying a summed \$180,000 for Mines Activity Council to put on their events on campus, including \$120,000 for E-Days. Perhaps you think the \$10 per person, totaling \$41,000, contributed to The Oredigger Newspaper could be put to better use. However, almost all of those 'free food' events, FAC, class

get-togethers, etc., that you have attended throughout your tenure at Mines have been happily subsidized by your fellow students.

Much of the money allocated by Budget Committee is used to provide events open to all of campus, which includes most club meetings. Budget Committee tries to provide funding for all the clubs on campus to enrich the student experience in all its variety.

I doubt that any student on campus has not benefited in some way from Budget Committee allocated money. That does not mean that that money is always being properly allocated. Budget Committee has fought that battle for many years, generally not creating any rule that has stood the test of a new Budget Committee. For instance, one of Budget Committee's most discussed item is food. Should they pay for food for club exclusive events, retreats, general club meetings, or campus recruiting events? This year, retreats and events publicized to campus were acceptable, whereas \$100 for Celebration of Mines was extravagant.

Also on the chopping block was conference costs. The standing decision was to pay for half of conference costs; this proved nebulous to define. What if the other conference costs were simply taken out of pocket and thus did not show up on the allocation request form? However, most problematic of all was the question, "Do they know that they have that money in their account?" This particular question was the result

of poor planning on the part of Budget Committee, though it will hopefully be corrected next semester.

Moving forward, Budget Committee needs to take steps to improve the process. After that, all of the responsibility should rest with the clubs. Budget Committee needs to pick one set of forms and keep them. They can add onto them, but they need to quickly find the optimal process and keep the forms the same from there on out. In addition, they need to widely publicize the criteria that will be used during the allocation process. Funding priorities need to be included in these criteria, because requests which satisfy the published criteria will still exceed the available funds. This process needs to be open to students, so that they can share their thoughts and ideas and fight for their free pizza.

Once they have achieved this, then they can pass the responsibility on to the clubs to make sure that they are appropriately using their money. At this point, there should be no question as to why particular items were cut from budgets, no reason to complain.

Editorials Policy

The Oredigger is a designated public forum. Editors have the authority to make all content decisions without censorship or advance approval and may edit submitted pieces for length so long as the original meaning of the piece is unchanged. Opinions contained within the Opinion Section do not necessarily reflect those of Colorado School of Mines or The Oredigger. The Oredigger does not accept submissions without identification and will consider all requests for anonymity in publication on a case-by-case basis. Submissions less than 300 words will receive preference.

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ATHLETE OF THE WEEK ... ANGEL FORSLING

SENIOR: SWIMMING TEAM

Trevor Crane
Staff Writer

The Colorado School of Mines' swimming and diving season is over, but that has not stopped senior swimmer Angel Forsling from succeeding. Her performances have propelled her to receive NCAA's Elite 88 award. Last week, Forsling was also selected as the Rocky Mountain Athletic Conference Women's Swimming and Diving Academic Athlete of the Year.

The Elite 88 Award is an honor founded by the NCAA to recognize what it means to be a student athlete. One individual is chosen from each of the 88 national competitions, ranging from Division I football to Division III women's rowing. The award was created to reward the individual who has excelled both in the classroom and in competition. Forsling has received this

award for reaching the swimming and diving national championships, with the highest cumulative GPA among her competitors.

Forsling, a Petroleum Engineering major, was named to the Dean's list all four years at Mines, earning her a 4.0 cumulative GPA. As if that were not enough, she has earned various other scholarships, including the McKee Scholarship and the Wells Fargo Gold Scholar Award. She is also an active member in both Tau Beta Pi and Pi Epsilon.

The talented swimmer has had four successful years as an Oredigger, culminating in her final meet at the Swimming National Championships in Canton earning Honorable Mention All-American honors with a 12th place finish in the women's 100 breaststroke. Her time of 1:05.05 was the best Mines

has ever seen, and she continued to excel, by breaking three different Colorado School of Mines records in the 200 IM (2:10.43), the 50 breaststroke (30.28), and the 200 breaststroke (2:23.19).

Her swimming days at Colorado School of Mines have come to a close, and Forsling looks to the future. With a job awaiting her in California, she is following a family tradition. As she states, "My grandfather owned his own oil and gas company, so my family always suggested that I look into petroleum engineering."

Forsling joins teammates Andrew Corman, Jesse Dennis, Travis Ransom, Kevin Shaw, and Kevin Wood in being named First Team Academic All-RMAC and earned the Elite 88 award alongside Colorado School of Mines track standouts Aaron Swift and Marie Patton.



PHOTO COURTESY CSM ATHLETICS

CSM places at SAC relays

Trevor Crane
Staff Writer

The Colorado School of Mines men's and women's track teams traveled to Walnut, California, over the weekend to perform in the Mt. SAC relays. This year marks the 52nd annual running of the meet, and ranges in competition from high school standouts to post-collegiate competition. Athletes from around the world, spanning big and small schools alike, come out to compete. For a team that usually attends meets near and around the Rocky Mountain area, the Mt. SAC meet is a great experience for the Oredigger athletes and one of the biggest meets of the season.

In the women's sprints, Kiera Benson continued her outstanding career. Her time of 12.00s in the 100m was good enough for a sixth place finish out of the 41 competitors. Her personal record in the event is 11.88s, which she ran last weekend in Boulder, breaking her own school record by more than a tenth of a second. That time of 11.88s would have been good

enough to win the event at the relays on Friday.

The best finish by a Mines runner was turned in by Marie Patton, in her second place finish in the open 3000m steeplechase. Coming in only behind Western Washington's Courtney Olseon by .32s, Patton's time of 10:42.87 is only 9 seconds off the school record. But Patton has shown excellence off the field as well, as she was recently named the RMAC's female Academic Athlete of the Year for indoor track and one of NCAA's Elite 88, an award given to the competitor with the highest GPA at their sport's national championships.

On the men's side, Mark Husted coasted to a ninth place finish in the 83-competitor Open 800m race, one of the most demanding of the events in track. He was the top finisher for the Orediggers with a time of 1:51.76 and currently shares the top time in the nation for Division II this season thanks to his 1:50.74s performance last weekend in Boulder. Husted was joined in the event by sophomores Ryan Hanley (33rd, 1:53.93), Ryan Crisp (35th, 1:54.02),

and thrower Cole Carveth (38th, 1:54.24).

Mines also had two athletes compete in the Olympic Development heats, or races that are designed to be more competitive and to help propel students into post-collegiate competition. For the women, standout distance runner Sydney Laws placed 21st behind a time of 35:56.88. In the men's 10,000m, junior Aaron Swift came in 26th in 30:18.66.

Other finishes by Mines included sophomore Tyler Curtis in the steeplechase (16th, 35:56.88), Michael Calhoun in the 400m hurdles (9th, 54.43), Russel Drummond in the 1500m (43rd, 3:51.77), Ben Zywicki in the 5000m (15th, 14:10.95), and Mack McClain in the 5000m (17th, 14:16.58).

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Changes in computer lab policy

Janeen Neri
Nonchalant Pacifist

Mines is planning a major re-vamp in the Computer Commons environment beginning in fall, 2010. The changes will include signs requesting students not to use their cell phones in the CC lab and separate study rooms adjacent to the lab that will allow groups of students to study or meet without disturbing others. “We know that if these measures were present,” said CCIT spokesperson Brian Wood, “the students would be happy to oblige. Students will be falling over themselves to stop bothering others with their loud conversations.”

When asked about the changes, Mines students supported the notion. “I’m so glad they’re raising awareness like this,” said freshman Molly Del Conte, “I had no idea how inconsiderate it was to use my cell phone when other people were studying! I’m really glad they’re putting these signs up, so everyone will be aware. I’m sure if we were all informed about this problem, we would be more capable of making the CC lab a great place to be!”

Sophomore Rafe Merritt commented, “I like the idea of meeting

rooms. I always felt terrible when I had to have a team meeting in the computer lab, because there’s all these ‘people’ doing work on these computers and trying to concentrate. I tried to keep the noise level down, but I kept feeling like I was disturbing everyone else.”

The single biggest problem, Wood explained, was a lack of awareness. “Most people,” he said, “have never been told that having a conversation on your cell phone is really distracting to others. They have never seen the animated messages in movie theaters about cell phone usage, or been in a supermarket, and met one of those annoying dudes with a Bluetooth headset, but thought he was being friendly, but really he was talking to someone else on the phone, and he didn’t really want to invite you to dinner, but you followed him to his house anyway, and really it just got awkward really, really fast... Most people haven’t heard about the science that shows why phone conversations are harder to filter out than normal conversations – if only half a conversation is overheard, the brain has to stay on alert in case a response is required. But a tasteful sign asking them not to do it should be enough to change their behavior. After all, the only

thing they need to do is walk outside when they receive a call.”

As for the team meetings, Wood said that the CC lab is a popular place to hold them, because of the computer access, but it can be difficult for teammates to communicate without disturbing the independent studiers. “There’s this weird phenomenon,” said Wood, “where people having a meeting sort of progressively talk louder and louder. Also, they will inevitably stray to less pertinent topics such as discussing the heaviness of their course load or about how Mines is ‘screwing them over.’ We decided to provide separate rooms for these meetings that have close access to the computer lab, but also walls and a door. That way, people can talk about whatever they wish without fear of disturbing the entire populace of the CC lab. Again, we are confident that Mines students, as polite and well-mannered as they are, will be happy to use this new feature.”

The changes will be implemented beginning this fall. The meeting rooms will be converted from rooms previously designed for this exact purpose, and the signs about cell phone use will remain posted on the doors, as they always have been.



Top ten reasons why Senior Design stinks

Mike Stone
Content Manager

- 10) Time
- 9) Sometimes Wasteful Assignments
- 8) Time
- 7) Time
- 6) Time
- 5) Time
- 4) The Biomass Stench
- 3) Time
- 2) Time
- 1) Time

America’s greatest pastime: mooning

Turning the other, other cheek

Mike Stone
¾ Moon Forecaster

A recent poll, just released by NPR, among 300,000 American high school and college-aged students asked in-depth questions about how they spent their free time. Major, but not surprising, findings included that over 25% spend at least two hours a week playing an instrument, 85% are involved in some kind of sport or athletic activity, and 96.9% watch at least three hours of television per week. The hugely surprising statistic among the findings shows that an entire 100.00% of those polled engage in mooning activities if on a road trip.

Mooning, like most semi-erotic activities among young adults, involves showing a group of people the moon-er’s bare butt. The people who saw the butt (the moon-ees) will then respond with groaning, laughing, looking away, intensely staring, or some combination of that. The use is usually for comedic purposes and is specifically useful on long road trips due to the monotony of the road and a lack of activities in the back seat. To add to the unique nature of this universally accepted pastime is the bonus of the “caravan.”

Anytime there is a road trip, people get bored. Anytime there is a road trip that requires multiple cars due to the size of the traveling group, people still get bored, but find it easy to create games with the other car. These games include

writing signs and placing them on the window, yelling through open windows at each other, and running the other car into a bridge embankment. The last and most commonly used game is the “passing lane drive-by.” This, just like it sounds, involves the trailing car to pass the front car on the left while all passengers on the right side of the car moon the moon-ees. Bonus points are added for pressing against the window, having a completely open window, or the rooster.

Out of the 300,000 students who were polled, not a single one responded with a negative thing to say about mooning. Mines junior Steve Wheeler told the Oredigger, “I know, right? This has got to be the cheapest, most fun way to pass the time in a car. The other car doesn’t expect it and your car laughs for hours from that four-second prank.”

Graduating senior Dan Staton also said, “I know it’s hilarious, because I can see the other car’s reaction. They wouldn’t be laughing otherwise. That’s why I like to do the driving- so I can see the reaction, which is nay impossible if your butt is out the window. That, and a rare skin condition.”

While mooning is vastly popular among high school and college students, it is still in a majority of funniocity among adults according to a separate poll. On the rise in the funniocity category for adults is sending their children to a difficult engineering college.

Global warming linked to obesity

Erik Lord
Staff Writer

Recent scientific data is pointing to the root cause of rising temperatures across the globe – and surprisingly, it has nothing to do with greenhouse gases. A study conducted by leading scientists at Wood’s Hole Oceanographic Institute in Massachusetts has revealed a link between increased rates of obesity in adolescents and the subsequent rise in temperatures near populated areas.

The unexpected connection was discovered when Dr. Fredrick Fishman was analyzing temperature data for the state of Ohio. While recreationally reading an article on the obesity epidemic across the same state, Fishman, a well-respected climate scientist, noticed a direct correlation between the highest recorded temperatures in his work and the published rates of childhood obesity.

“I initially thought it was just a coincidence,” Fishman told reporters. “But when I looked deeper into other cities across the nation, I saw exactly the same trend – higher temperatures in areas where there are heavier children.”

ures in areas where there are heavier children.” Fishman and other scientists at Wood’s Hole and across the world are conducting further studies to better understand the connection.

“At this point, we hypothesize that the connection is based on simple laws of thermodynamics,” Martins explained. “The human body is generally warmer than the surrounding atmosphere and, when those bodies are larger with more surface area, the amount of heat released by radiative heat transfer increases substantially. This leads to higher temperatures in the vicinity of [plump] kids.”

This was verified by a series of thermal imaging tests conducted on children of normal weight and those considered “obese” according to the perfectly accurate Body Mass Index (BMI). The obese children registered skin surface temperatures as much as 20 percent higher than those of skinnier children.

Dietitian and children’s psychologist Heidi Caldwell, who has pioneered a nationwide effort to reduce overeating in children, provided insight on how the problem can be mitigated. “The program I’ve developed, ‘Put the

Twinkie Down,’ revolves around two major steps to adolescent health,” Caldwell explained. “The first point of emphasis is on increased physical activity to burn more calories. The second is for heavier children to wear clothing that covers less of their skin surface. This is for the safety of the child, keeping core body temperatures below the point of possible health problems such as heat stroke.”

Caldwell and Fishman both agree that steps can be taken immediately to improve the situation and limit the adverse effect on the environment. “We both endorse children to exercise more regularly and wear clothing that covers less of their skin,” Fishman explained. “But we certainly don’t recommend doing both at the same time. No one wants to see that.”

Dr. Fishman strongly urged parents to take responsibility. “If we make this a national priority,” he proclaimed, “it is not too late to reverse this warming trend and save the planet. But we’re going to have to put companies like Hostess out of business.”

Hostess CEO Jacob Reynolds had no comment for The Oredigger, but did provide a complimentary box of their latest product “Cream Grenade,” a cream-filled snack in the shape of the hand-launched explosive weapon. Reviews were unanimously positive, and left several staff writers with a reportedly ‘warm feeling.’